Message

From: Craig, Harry [Craig.Harry@epa.gov]
Sent: 7/14/2017 8:48:19 PM
To: Garvey, Melanie [Garvey.Melanie@epa.gov]; Shuster, Kenneth [Shuster.Kenneth@epa.gov]
CC: Crumbling, Deana [Crumbling.Deana@epa.gov]
Subject: FW: Examples of Explosives/Metals/Perchlorate Decision Units from Ft Wainwright/Tanana River, AK OB/OD Site

F.Y.I. – I already sent this example of where excavated, screened to remove frag and UXO, and stockpiled soils were not homogeneous for metals and explosives concentrations in soil.

Harry

From: Craig, Harry
Sent: Thursday, July 06, 2017 3:51 PM
To: Maddox, Doug <Maddox.Doug@epa.gov>
Cc: Faulk, Dennis <Faulk.Dennis@epa.gov>
Subject: FW: Examples of Explosives/Metals/Perchlorate Decision Units from Ft Wainwright/Tanana River, AK OB/OD Site

Doug,

The 550 cy stockpiles at Tanana River with 47 increments for metals and explosives (DU-9) did not meet the < 30% RSD DQO for some COCs. This is another example of where the number of increments needs to be increased for larger DUs or larger stockpiles (~ 500 cy).

Harry

From: Craig, Harry
Sent: Tuesday, May 23, 2017 11:32 AM
To: Maddox, Doug <Maddox.Doug@epa.gov>
Cc: Walsh, Michael ERDC-CRREL-NH (Michael.Walsh@erdc.dren.mil) <Michael.Walsh@erdc.dren.mil>; roger. brewer (roger.brewer@doh.hawaii.gov) <roger.brewer@doh.hawaii.gov>; Hendrickson, Charles <hendrickson.charles@epa.gov>
Subject: Examples of Explosives/Metals/Perchlorate Decision Units from Ft Wainwright/Tanana River, AK OB/OD Site

Doug,

Here are examples of the data from the Tanana River, AK OB/OD site. Note these DUs are much smaller than the Umatilla DUs, which are 40,000 sq ft (200'x200').

Harry

Table 4-1 Multi-Incremental Soil Sample Summary

Decision Unit	Depth[a]	Description	Size of Decision Unit	Number of Increments
DU-1	0-3 inches	Northernmost Portion of the Site	5,200 sf	49
DU-2	0-3 inches	Area North of Trenches	4,300 sf	48
DU-3	0-3 inches	Area Immediately Surrounding the Two Trenches	3,100 sf	121
DU-4	0-3 inches	Trench #2	1,400 sf	54
DU-5	0-3 inches	Trench #1	1,700 sf	72
DU-6	0-3 inches	Southernmost Portion of the Site	4,400 sf [b]	52
DU-7	Varies[c]	May, June, July 2016 Stockpile	850 cy	46
DU-8	Varies[c]	River Sediment Stockpile	350 cy[a]	52
DU-9	Varies[c]	2015 Stockpile	550 cy	47
DU-10	Varies[c]	September 2016 Stockpile	250 cy	53

Table 4-2 – MI Analytes with Elevated Relative Standard Deviations

Analytical Method	Analytes with RSD > 30%	Sample Location (RSD)
8330B	1,3-Dinitrobenzene	DU-9 (32%)
	2,4-DNT	DU-4 (104%) and DU-9 (33%)
	2,6-DNT	DU-9 (39%)
	2,4,6-Trinitrotoluene	DU-9 (40%)
	4-Amino-2,6-dinitrotoluene	DU-5 (31%) and DU-9 (99%)
	TETRYL	DU-9 (53%)
6850	Perchlorate	DU-9 (167%)
6020A/ 6010C	Antimony	DU-4 (30.5%)
	Cadmium	DU-4 (38.9%)
	Cobalt	DU-9 (32.1%)
	Copper	DU-9 (57.2%)
	Lead	DU-4 (51.8%)
1311/6010C	TCLP Chromium	DU-9 (67.4%)